



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,315	08/21/2000	Shmuel Shaffer	062891.0448	9000

7590  
Baker Botts LLP  
2001 Ross Avenue  
Dallas, TX 75201-2980

02/26/2004

EXAMINER

FOSTER, ROLAND G

ART UNIT	PAPER NUMBER
----------	--------------

2645

5

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/643,315

Applicant(s)

SHAFFER, SHMUEL

Examiner

Roland G. Foster

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2645

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-52 have been considered but are moot in view of the new ground(s) of rejection.

Nonetheless, the Official Notice, presented in the last Office action, mailed on Aug. 28, 2003 as Paper No. 2 (Hereafter the "last Office action"), concerning the concept and advantages of a PBX providing on-hold audio such as music and also providing a meet-me bridge is maintained. The prior art of record U.S. Publication No. US 2002/0191550 A1 is cited herein as evidence to support the examiner's taking of Official Notice. See the rejection below for further details.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 15, 24, 37, and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,597,667 B1 to Cerna (Hereafter "Cerna").

With respect to claim 1, see the following paragraphs for details on how Cerna anticipates particular limitations within the claim.

The limitation "establishing an audio conference between a plurality of devices coupled to a packet network" reads on the abstract and Fig. 1. The cellular system 200 comprises a packet network (col. 6, lines 1-9).

The limitation "determining that audio content of media from a particular device is undesirable" reads col. 3, lines 30-42 where the user of a wireless communication device determines that the audio content of media from his device is undesirable and thus sends a mute signal.

The limitation "disabling the media from the particular device to terminate communication of the media from the particular device to the other devices in the audio conference" reads on col. 3, lines 43-50 where the media (audio) from the user's device is muted (disabled) at the wireless system in order to terminate communication in response to the mute signal as discussed above.

Claim 15 differs substantively from claim 1 in that claim 15 recites a conference bridge that performs the functions equivalent to the method steps of claim 1. Therefore, see the claim 1 for additional details. In addition, "conference bridge" reads on Fig. 1, conference bridge 290

Art Unit: 2645

which comprise a "plurality of ports". The "media controller" reads on base station 210 which performs the actual muting on one embodiment (col. 6, lines 1-10).

Claim 24 differs substantively from claim 1 in that claim 24 recites software to perform steps equivalent to the method steps of claim 1. Therefore, see the claim 1 rejection for additional details. In addition, the cellular system and conference bridge are computer based and therefore rely upon a computer executing computer instructions (i.e., software).

Claim 37 differs substantively from claim 1 in that claim 37 recites various means that perform functions equivalent to the method steps of claim 1. Therefore, see the claim 1 for additional details. In addition, see Fig. 1 for various means that perform the method steps as recited in claim 1 and as previously discussed.

Claim 46 differs substantively from claim 1 in the following limitations.

The limitation "communicating a command to the conference bridge to terminate communication of the media from the particular device to the other device in the audio conference" reads on the muting command signal received from the user device as discussed in the claim 1 rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-7, 9, 12-16, 19-21, 23-25, 28-30, 32, 35-37, 39-43, 46, 47, 49, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,556,670 B1 to Horn (Hereafter "Horn"), of record, in view of U.S. Patent No. 6,614,781 B1 to Elliot et al. (Hereafter "Elliot"), of record.

With respect to claim 1, see the following paragraphs for details on how Horn discloses particular limitations within the claim.

The limitation "establishing an audio conference between a plurality of devices" reads on the abstract and Fig. 1.

The limitation "determining that audio content of media from a particular device is undesirable" reads on the abstract and col. 2, lines 5-53 where the system determines the existence of an offending conferee (e.g., conferee transmitting music-on-hold).

The limitation "disabling the media from the particular device to terminate communication of the media from the particular device to the other devices in the audio

Art Unit: 2645

conference" reads on the abstract and col. 2, lines 5-53 where the audio (media) from the offending conferee (particular device) is temporarily stopped (disabled).

Although Horn discloses that the plurality of device communicate via a telephone network (Fig. 1), Horn fails to specifically disclose that the network also includes a packet network.

However, Elliot (similarly to Horn) teaches of a telephone network based conferencing system (Fig. 1 and col. 17, lines 41-45) where the telephone network includes a packet network (col. 4, lines 30-48).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add a packet network as taught by the telephone based, conferencing system of Elliot to the telephone based, conferencing system of Horn.

The suggestion/motivation for doing so would have been to increase the bandwidth of the network, reduce network congestion (Elliot, col. 3, lines 26-3), and increase the efficiency of the network communication channels (Elliot, col. 3, lines 40-45 and col. 4, lines 1-8).

Claim 15 differs substantively from claim 1 in that claim 15 recites a conference bridge that performs the functions equivalent to the method steps of claim 1. Therefore, see the claim 1 for additional details. In addition, "conference bridge" reads on the audio conference bridges

Art Unit: 2645

(e.g., bridge 8) (Horn, Fig. 1) each of which comprise a "plurality of ports". The "media controller" reads on Horn, Fig. 2.

Claim 24 differs substantively from claim 1 in that claim 24 recites software to perform steps equivalent to the method steps of claim 1. Therefore, see the claim 1 rejection for additional details. In addition, see Horn, Fig. 2 which illustrates that the media controller relies upon a central processing unit 21. A central processing unit requires "software" in the form of processing instructions.

Claim 37 differs substantively from claim 1 in that claim 37 recites various means that perform functions equivalent to the method steps of claim 1. Therefore, see the claim 1 for additional details. In addition, see Horn, Figs. 1 and 2 for various means that perform the method steps as recited in claim 1 and as previously discussed.

Claim 42 differs substantively from claim 1 in the following limitations.

The limitation "receiving a recorded prompt to rejoin the audio conference" reads on Horn, col. 2, lines 47-51 where the offending conferee receives a recorded prompt to rejoin the conference.



Art Unit: 2645

The limitation "communicating a command to the remote location to rejoin the audio conference" reads on Horn, col. 3, lines 5-10 where a touchtone command is received at the controller (remote location) from the offending conferee to rejoin the conference.

Claim 46 differs substantively from claim 1 in the following limitations.

The limitation "communicating a command to the conference bridge to terminate communication of the media from the particular device to the other device in the audio conference" reads on Horn, Fig. 3 and col. 2, lines 55-67 where a conferee can activate an anti-music-on-hold button (communicate a command) to the bridge to terminate communication of the offending conferee.

With respect to claims 2, 19, 25, and 43, the offending conferee is generating "on-hold" music as discussed in the claim 1 rejection above.

With respect to claims 5, 16, 28, and 39, see the Horn, abstract, col. 2, lines 5-67, and Figs. 2 and 3.

With respect to claims 6, 9, 23, 29, 32, 40, 49, and 51, see the claim 46 rejection above for further details. The telephone transmit single source signals (voice). See also Horn, Fig. 3.

With respect to claims 7, 13, 30, and 47, see Horn, col. 2, line 51-53 and col. 3, lines 5-9.

With respect to claims 12, 14, 21, 35, 36, and 41, see the claim 42 rejection above for further details.

With respect to claims 20, see Horn, Fig. 1, conference bridge/PBX 9.

Claims 3, 4, 26, 27, 38, 44, 45, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn in view of Elliot above as applied to claims 1, 24, 37, 42, and 46, and further in view of U.S. Patent Application Publication No. US 2002/0191550 A1 (Hereafter "Wilson"), newly cited (in response to applicant's traverse of the examiner's Official Notice).

Although Horn discloses a conference bridge/PBX 9 and the processing of on-hold audio such as music during a conference (as discussed above), Horn fails to specifically that the PBX develops the hold audio (e.g., music) or that a meet-me bridge is implemented at the PBX.

However, Wilson teaches of a PBX that provides a teleconferencing system (paragraph 0005) where the teleconferencing system in turn provides a meet-me bridge (paragraph 0007) and music while participants are on hold (paragraph 0028).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add on-hold audio generation and support for a meet-me bridge as

Art Unit: 2645

taught by the PBX conferencing system of Wilson to the PBX conferencing system disclosed by Horn.

The suggestion/motivation for doing would have been to increase the flexibility and user-friendliness of a PBX by generating audio when the PBX determines that a party has been placed on hold so that the holding party knows that he is on hold and is entertained by audio programming (e.g., music) during the hold as is notoriously well-known in the art of PBX systems with hold circuits. In addition, adding the support of meet-me features where conference participants need only call a specific number to be automatically added to the conference by the PBX also as well known in the art would have increased the versatility, accessibility, and user-friendliness of the PBX conference feature disclosed by Horn. For example, the use of conferencing meet me systems "in-house" (e.g., in a local PBX system) would have increased versatility by allowing conferencing according to a schedule or on an ad-hoc basis and by increasing administrative simplicity, practicality, and economy (Wilson, paragraph 0007).

Claims 8, 10, 11, 22, 31, 33, 34, 50, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn in view of Elliot as applied to claims 1, 6, 9, 15, 24, 29, 32, 46, 49, 51, above, and further in view of U.S. Patent No. 5,548,638 to Yamaguchi et al. ("Yamaguchi"), as used in the last Office action.

Art Unit: 2645

With respect to claims 8, 10, 31, 33, 50, and 52, although Horn discloses measuring the energy of the speech signal (col. 2, lines 39-42), Horn fails to disclose measuring the power characteristics of the signal and excluding based on highest power measurement.

However, Yamaguchi (similarly to Horn) teaches of a teleconferencing system that removes offending media such as music based on a sound activity factor (col. 2, lines 47-52) that uses a voice activity detector that measures maximum average power (col. 11, lines 10-15 and lines 44-50).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add a removal of offending media based upon a sound activity factor that measures maximum average power as taught by the teleconferencing system of Yamaguchi to the teleconferencing system disclosed by Horn that removes offending media based on energy measurements.

The suggestion/motivation for doing so would have been to increase the user-friendliness and reliability of a teleconferencing system because offending media such as music as a high sound activity factor (i.e., "practically no silent intervals) (Yamaguchi, col. 3, lines 33-40). In addition, sound activity factor increases reliability and accuracy by preventing the "erroneous detection of sneak-path PB signal, ensuring detection of interference or disturbance sounds" (Yamaguchi, col. 3, line 40-44). The use of maximum power detection increase the accuracy of

Art Unit: 2645

the voice activity factor detection by accounting for background noise (Yamaguchi, col. 11, line 65 – col. 12, line 2).

With respect to claims 11 and 34, see Horn, col. 2, lines 15-16.

With respect to claim 22, see Horn, Fig. 3 and the claim 8 rejection for further details.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn in view of Elliot as applied to claim 15 above, and further in view of U.S. Patent No. 5,916,302 to Dunn et al. ("Dunn"), as used in the last Office action.

Horn fails to disclose that the bridge comprises a gateway using virtual ports and transmitting media in the form of audio packets.

However, Dunn (similarly to Horn) teaches of a PSTN based, teleconferencing system (abstract and Fig. 1) that comprises a gateway (Fig. 1, server 12 and Fig. 11, conference server 93 and gateway 115) transmitting media in the form of audio packet, such as via the web 116 to computer 80. The use of a temporary port at one of the gateways (e.g., conference server 93) to establish a temporary connection would be equivalent to a "virtual" port.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add the various gateways transmitting media in the form of audio

Art Unit: 2645

packets via virtual ports as taught by the PSTN based, teleconferencing system of Dunn to the PSTN based, teleconferencing system disclosed by Horn.

The suggestion/motivation for doing so would have been to increase the versatility and flexibility of a conferencing system by adding conferencing servers (gateways) that allow "participant in a multimedia conference to vary services receiving in the PSTN during the conference; without required intervention of PSTN operators and other PSTN representatives" (Dunn, col. 2, lines 20-28). In addition, cost would have been decreased because gateways to public data networks such as the Internet "permit such control at a cost that can be attractive to both the PSTN and its customers" (Dunn, col. 2, lines 30-35).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


Art Unit: 2645

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roland Foster whose telephone number is (703) 305-1491. The examiner can normally be reached on Monday through Friday from 9:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S. Tsang, can be reached on (703) 305-4895. The fax phone number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 306-0377.

  
Roland G. Foster  
Primary Patent Examiner  
February 18, 2004